

2009 Consumer Confidence Report

Water System Name: MD-1, Hidden Lakes

Report Date: 6/17/10

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2009.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Surface water from lake

Name & location of source(s): Millerton Lake located approximately 8 miles east of HWY 41 and north of Road 145

Drinking Water Source Assessment information: A source assessment was conducted in April 2003 for Millerton Lake. No contaminants exceeding current MCLs were found, but the assessment identified recreational activities in the surface water supply, septic systems common to the area and extreme weather conditions that may affect the pump intake area, as having the potential for outside contamination. A copy of the complete assessment may be viewed at the State's website, www.dhs.ca.gov/ps/ddwem/technical/dwp/source_info/source_index.htm, or by requesting a summary of the assessment from Environmental Health at (559) 675-7823.

Time and place of regularly scheduled board meetings for public participation: Meetings are held at 9:00 a.m. each Tuesday, except the fifth Tuesday of any month, at the Board of Supervisors Chambers: 200 W. 4th Street, Madera.

Visit the County website, www.madera-county.com/supervisors/agenda.html for a copy of the agenda.

For more information, contact: Julio Padilla Phone: (559) 675-7820

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or ☐ ictogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the state Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

| Microbiological Contaminants (complete if bacteria detected) | Highest No. of Detections | No. of months in violation | MCL | MCLG | Typical Source of Bacteria |
|---|---------------------------|----------------------------|--|------|--------------------------------------|
| Total Coliform Bacteria | (In a mo.) 1 | 0 | More than 1 sample in a month with a detection | 0 | Naturally present in the environment |
| Fecal Coliform or <i>E. coli</i> | (In the year) 0 | 0 | A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i> | 0 | Human and animal fecal waste |

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

| Lead and Copper (complete if lead or copper detected in the last sample set) | No. of samples collected | 90 th percentile level detected | No. sites exceeding AL | AL | PHG | Typical Source of Contaminant |
|---|--------------------------|--|------------------------|-----|------|---|
| Lead (ppb) | 5 | 7.3 | 0 | 15 | 2 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 5 | 0.22 | 0 | 1.3 | 0.17 | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL | PHG (MCLG) | Typical Source of Contaminant |
|--|-------------|----------------|---------------------|------|---------------|--|
| Sodium (ppm) | 5/15/06 | 7 | 7 | none | none | Salt present in the water and is generally naturally occurring |
| Hardness (ppm) | 5/15/06 | <20 | <20 | none | none | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring |

*Any violation of an MC or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL [MRDL] | PHG (MCLG) [MRDLG] | Typical Source of Contaminant |
|--|--------------|----------------|---------------------|---------------|--------------------------|---|
| Gross Alpha (pCi/L) | 2007 | 3.4 | 3.4 | 15 | (0) | Erosion of natural deposits |
| Nitrate (ppm) | 2007 | 0.70 | <2.0 – 2.1 | 45 | 45 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| DBCP (ppt) | 5/2005 | 10 | 10 | 200 | 1.7 | Banned nematocide that may still be present in soils due to leaching/runoff from former use on soybeans, cotton, vineyards, tomatoes and tree fruit |
| Total Trihalomethanes (ppb) | 3, 9 & 12/09 | 42 | 42 | 80 | N/A | By-product of drinking water chlorination |
| Total Haloacetic Acids (ppb) | 8 & 11/08 | 51 | 41 – 61 | 60 | N/A | By-product of drinking water disinfection |
| Total Organic Carbon (ppm) | Monthly 2009 | 1.5 | 1.2 – 2.1 | TT | N/A | Various natural and manmade sources |

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL | PHG (MCLG) | Typical Source of Contaminant |
|--|-------------|----------------|---------------------|------|---------------|---|
| Chloride (ppm) | 5/06 | 6.3 | 6.3 | 500 | N/A | Runoff/leaching from natural deposits; seawater influence |
| Color | 5/06 | <5 | <5 | 15 | N/A | Naturally-occurring organic materials |
| Specific Conductance (µMHO/cm) | 5/08 | 52 | 52 | 1600 | N/A | Substances that form ions when in water; seawater influence |
| Sulfate (ppm) | 5/06 | .5 | .5 | 500 | N/A | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids or TDS (ppm) | 5/06 | 46 | 46 | 1000 | N/A | Runoff/leaching from natural deposits |

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at

risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL or Violation of Any TT or Monitoring and Reporting Requirement

We are required by drinking water regulations to *monitor* your drinking water for specific contaminants on a regular basis. The results of regular monitoring are indicators of whether or not your drinking water meets all health standards. As shown by the above tables, the Hidden Lakes' water system had one violation; the Total Haloacetic Acid exceeded the Maximum Contaminant Level (MCL). With that one exception, your drinking water meets or exceeds all Federal and State requirements. Though we've learned through our monitoring and testing that some contaminants have been detected, the EPA has determined that your water IS SAFE at these levels.

Total Haloacetic Acids – Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. We believe the increased result is due to a State Department of Health Services and County Environmental Health Department mandate to increase the chlorination time. The inability of the plant to produce the quantity and quality of water needed to sustain growth in the community has resulted in the adoption of a moratorium by the Board of Supervisors. Planning grants are expected to be released this summer to create the final plans and specifications for modification of the treatment process to eliminate this problem. The County will be working with property owners in the district to identify these and other needed improvements and the manner in which to fund them.

Monitoring Violation – This year we became aware of monitoring violations for the years **2007 & 2008** for General Minerals, Physical, and Inorganic's**. These components in surface water are required to be taken annually, but had been mistakenly included in the ground water schedule of every three years. Even though we have since taken the required samples in 2009 and the samples showed we are meeting drinking water standards, you have a right to know of this monitoring violation.

** Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Fluoride, Mercury, Nickel, Perchlorate, Selenium, Thallium, Lead, Silver, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium, Zinc, color, SEC, Turbidity, Total Hardness, Alkalinity, Chloride, Fluoride, Nitrate, Nitrite, Sulfate, pH, Bicarbonate, Carbonate, Corrosively, MBAS, Odor, TDS, Hydroxide

For Systems Providing Surface Water as a Source of Drinking Water

| TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES | |
|--|---|
| Treatment Technique ^(a) (Type of approved filtration technology used) | Package Conventional Surface Treatment Plant – Rescue Engineers |
| Turbidity Performance Standards ^(b) (that must be met through the water treatment process) | Turbidity of the filtered water must: 1 – Be less than or equal to <u>0.3</u> NTU in 95% of measurements in a month. 2 – Not exceed <u>0.3</u> NTU for more than eight consecutive hours. 3 – Not exceed <u>1.0</u> NTU at any time. |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1. | 100% |
| Highest single turbidity measurement during the year | 0.17 |
| Number of violations of any surface water treatment requirements | 0 |

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Summary Information for Violation of a Surface Water TT

As shown by the above table, the Hidden Lakes' water system had no violations of the surface water treatment process. We hope you find this report informative and helpful. Please call our office if you have questions. The County of Madera works continuously to provide the best available water to every tap. We ask that you, our customers, help us protect our water sources. Water is the heart of our community, our way of life, and our future.